

**CONTRAFREELADING WITH MOVIE STIMULI IN JAPANESE MACAQUES**

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Contrafreeloading is a phenomenon in which animals work for rewards even though they can get the same rewards for free. This phenomenon has been reported in wide taxa of animals when tested with food rewards. One explanation for the phenomenon is provided by the information primacy model, suggesting that animals are motivated to acquire not only the reward itself but also the information about the position and/or quality of the reward. This study examined if such contrafreeloading occurs when the subject monkeys are tested in a sensory reinforcement procedure with movie stimuli. Three male singly-caged Japanese macaques were studied in their home cages each of which was divided equally into two compartments. In the first condition, one compartment had a monitor presenting movies continuously ("free movies"), and the other had a monitor presenting movies only when the subject touched the color square on the screen ("earned movies"). In the second condition, the free movies were replaced by blank screen to exclude the possibility that the touch responses were reinforced by disappearance of the color square. The results from first condition revealed that the subjects continued to respond to the earned movies although identical movies were available as free movies on the other monitor. The subjects made significantly more touch responses ( $\chi^2 = 120.65$ ,  $P < 0.001$ ) and the earned movies were presented significantly longer ( $\chi^2 = 5.41$ ,  $P < 0.05$ ) in the second condition than the first condition. These results suggest that the information about movies as well as movies themselves is valuable for monkeys. This study provided the first evidence that contrafreeloading occurs even with the movie rewards. Routine care of monkeys and experiments were performed in accordance with guidelines of the Primate Research Institute, Kyoto University.

**Keywords:** Contrafreeloading, Controllability, Japanese macaques, Movie